

Attorney's Docket No. 004900-169Application No. 09/386,850

Page 2

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 6, with the following amended paragraph:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a divisional of application Serial No. 09/476,120, filed on June 7, 1995, now United States Patent No. 6,025,143, which is a continuation of application Serial No. 08/153,277, filed on November 17, 1993, now United States Patent No. 5,859,189, which is a continuation of application Serial No. 07/499,276, filed on October 11, 1989 ~~July 19, 1990~~, now abandoned.

Please replace the paragraph beginning on page 2, line 20 and ending on page 2, line 23, with the following amended paragraph:

Another subject of the present invention is the polypeptide SMR1 which gives the maturation products of formula II, III, IV and V. This polypeptide corresponds to the formula (SEQ ID NO: 8):

Please replace the paragraph beginning on page 10, line 35 and ending on page 11, line 7, with the following amended paragraph:

An interesting characteristic is the presence of pairs of basic amino acids Arg-Arg at positions 27-28 and 33-34. Such dipeptides represent potential sites of cleavage by maturation enzymes (Lazure, C., et al (1983) Can. J. Biochem., Cell Biol. 61, 501-515

Attorney's Docket No. 004900-169
Application No. 09/386,850
Page 3

and Docherty, K. et al (1982) Ann. Rev. Physiol. 44, 625-638). They flank a tetrapeptide Gln-His-Asn-Pro (SEQ ID NO: 1). The tetrapeptide and its adjacent sequences are located in a hydrophilic environment which renders this region accessible to possible maturation enzymes.

Please replace the paragraph beginning on page 11, line 8 and ending on page 11, line 18, with the following amended paragraph:

The cleavage of Arg-Arg linkages by a maturation enzyme followed by the removal of the basic residues by carboxypeptidase E (Fricker, L.D. et al (1983) J. Biol. Chem. 258, 10950-10955) and possibly an aminopeptidase (Loh, Y.P. et al (1984) Ann. Rev. Neurosci. 7, 189-222) would produce a mixture of tetrapeptide (Gln-His-Asn-Pro (SEQ ID NO: 1)) and pentapeptide (Gln-His-Asn-Pro-Arg (SEQ ID NO: 3)), since "Pro-Arg" is not a good substrate for carboxypeptidase E. Other post-translational modifications could also include the formation of pyroGlu acid derivatives of these products, giving rise to a mixture of pyroGlu-His-Asn-Pro-Arg (SEQ ID NO: 4) and pyroGlu-His-Asn-Pro (SEQ ID NO: 2). These structures recall those of thyroliberin (TRH).